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RESEARCH MEMORANDUM

PAYGRADE STRUCTURE AND FLOWS INTO THE "COMPRESSED" RATINGS

Henry B. Everage, Cdr., USN

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ABSTRACT

This research memorandum examines the billet authorizations on the Enlisted Billet File to gain some insight into paygrade distributions and how these distributions relate to promotion opportunity. Of particular interest were the "compressed" ratings that occur at the senior paygrades. Comparisons of promotion opportunities were made among ratings and between "compressed" and "noncompressed" rating groups.



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EXECUTIVE SUMMARY

INTRODUCTION

This research memorandum is part of the Enlisted Force Management Integration Study, which has the primary objective of determining consistent policies that will enable the Navy to achieve and maintain an executable, cost-effective force structure.

As part of the investigation into the Navy's policies on billet structure, this research memorandum examines authorizations on the Enlisted Billet File as of June 1988. The paygrade distribution of billets is examined to gain some insight into how paygrades relate to promotion opportunities and how they affect sea/shore rotation. In addition, billet distributions are examined to determine the consistency among various ratings and groups of ratings, with a focus on "compressed" and "noncompressed" ratings.

Promotion opportunity comparisons are based on a simple billet promotion index, defined as the ratio of billets of one paygrade to the billets of the paygrade below it. The effects of continuation behavior on promotion opportunity are not addressed in this research memorandum.

The intent of this analysis is to provide billet structure data for use in the Enlisted Force Management Integration Study and to aid Navy manpower managers in developing guidelines for paygrade distribution.

COMPRESSED RATINGS

"Compressed" ratings are distinguished from other enlisted ratings in that they combine either general or service ratings that possess similar occupational skills to form a broader occupational field. Most of these rating combinations occur at the E-8 or E-9 paygrade.

COMPARISON OF ENLISTED BILLET STRUCTURES

With a few exceptions, both the compressed and noncompressed ratings groups follow similar patterns of billet "flows" from E-4 through E-9. These flow patterns are characterized by minor decreases in the number of billets from E-4 to E-5 then sharp decreases in the number of billets from E-5 through E-9. The billet structure comparisons are confined to petty officers; strikers and apprentices are not included.

Promotion opportunity comparisons based on weighted arithmetic means and representing average promotion indices are presented in table I.

Table I. Average billet promotion indices (percentages)

Paygrade	ALNAV	Noncompressed ratings	Compressed ratings	Ratings compressed at E-8	Ratings compressed at E-9
E-9	47.8	50.6	40.5	37.6	41.4
E-8	33.1	30.6	37.8	30.9	40.6
E-7	46.0	47.3	42.6	45.4	40.5
E-6	87.4	89.8	83.1	88.2	77.7
E-5	100.9	97.1	109.5	102.5	112.0

A comparison of the two groups reveals that the noncompressed ratings group has higher billet promotion indices for E-6, E-7, and E-9; the compressed ratings group has higher indices for the E-5 and E-8 paygrades. Large variations in billet promotion indices exist among individual ratings within both groups. For example, the average billet promotion index for compressed ratings to E-9 (40.5 percent) was the result of averaging the weighted values of 15 ratings over a range of individual indices from 12.0 percent to 47.6 percent. The 50.6 percent average index to E-9 for noncompressed ratings was the result of averaging the weighted values of 51 ratings over a range of individual indices from 14.3 to 113.3 percent.

The promotion indices vary greatly between each rating group as well as among rating types. For example, the sea-intensive Sonar Technician compressed rating has a billet promotion index to E-9 of 24.4 percent; whereas, the shore-intensive Personnelman noncompressed rating has a corresponding index of 76.0 percent.

When viewed on a macro level, it is apparent that one rating group may have higher billet promotion indices at certain paygrades than another group. However, this characteristic may not hold true for every rating within the group. There is no evidence of a "problem" with compressed ratings. Their billet ratios are within the range or are consistent with billet ratios for noncompressed ratings.

LEGALMAN, MASTER-AT-ARMS, AND NAVY COUNSELOR RATINGS

The Legalman (LN), Master-at-Arms (MA), and Navy Counselor (NC) ratings are unique in that they possess characteristics similar to the compressed ratings but technically are not compressed ratings. These ratings are established at the more senior paygrades (LN and MA at E-5, NC at E-6) and are composed of personnel who have converted from other ratings.

A review of rating conversions to LN, MA, and NC that occurred between March 1980 and December 1987 revealed that, although the number

of ratings represented is quite large, some ratings supply more personnel than others. Personnel from the Yeoman, Boatswain's Mate, Mess Management Specialist, Ship's Serviceman, and Personnelman ratings tend to convert with greater frequency than others.

The reasons for personnel conversion to other ratings are beyond the scope of this memorandum, but it may be assumed that one of the reasons is the perception of better promotion opportunities. However, because promotion opportunity varies greatly among paygrades and ratings, the evidence to support this assumption is inconclusive.

CONCLUSIONS

In general, the enlisted billet flow pattern for both compressed and noncompressed ratings is characterized by a slight decrease in the number of billets from E-4 to E-5 followed by a sharp decrease in the number of billets from E-5 through E-9. However, the number of billets in each rating and paygrade varies significantly.

A comparison of average billet promotion indices (an incomplete measure of promotion opportunity) reveals that the noncompressed ratings group has higher mean values at the E-6, E-7, and E-9 paygrades. This indicates that, as a group, their promotion opportunities, disregarding continuation behavior, are better than those in the compressed ratings group at these paygrades. Examination of individual ratings within these two groups reveals that the indices do not follow this group characteristic but vary significantly with rating and paygrade. There is no evidence of compressed ratings billet ratios being out of line or being inconsistent with the billet ratios for noncompressed ratings.

CONTENTS

	Page
Illustrations	xi
Tables	xi
Introduction	1
Compressed Ratings	2
Comparison of Enlisted Billet Structures	2
Legalman, Master-at-Arms, and Navy Counselor Ratings	11
Conclusions	13

ILLUSTRATIONS

	Page
1 Range of Promotion Indices for Individual Ratings Billets (for Compressed and Noncompressed Ratings)	8
2 Paygrade Distribution (for Compressed and Noncompressed Ratings)	10

TABLES

	Page
1 Structure of Compressed Ratings Billets (June 1988)	3
2 Path of Advancement for Compressed Ratings	4
3 Structure of Noncompressed Ratings Billets (June 1988)	5
4 Average Billet Promotion Indices	6
5 Range of Billet Promotion Indices	7
6 Individual Billet Promotion Indices	11
7 Sources of Rating Conversions (Ratings Constituting 3.0 Percent or More of Total Conversions)	12

INTRODUCTION

This research memorandum is part of the Enlisted Force Management Integration Study, which has the following objectives:

- Investigate the consistency of Navy policies, compensation levels, and billet structure
- Determine the least-cost force structure and the policies and compensation to maintain it, given a set of unit-level constraints on billet structure
- Determine a set of policies that will enable today's inventory to evolve into some target inventory quickly and economically, without adversely affecting personnel readiness.

As part of the investigation into the Navy's policies on billet structure, this research memorandum examines authorizations on the Enlisted Billet File as of June 1988 to better understand the enlisted billet structure. This billet structure is the result of various personnel policies implemented to meet current manpower requirements. These requirements change continually, of course, as fleet hardware is modernized or as new hardware is introduced, or as an austere fiscal climate imposes new constraints. Consistency between personnel policies and billet structure is therefore necessary in achieving an executable, cost-effective force structure.

This research memorandum examines the paygrade distribution of billets to gain some insight into how they relate to promotion opportunities and how they affect sea/shore rotation. In addition, billet distributions are examined to determine the consistency among various ratings and groups of ratings, with a focus on the "compressed" and "noncompressed" ratings. This paper looks at the billet structures of the "feeder" ratings that are combined into a single compressed rating, normally at the E-8 or E-9 paygrade, to determine if the billet flows to the next higher paygrade are consistent with those of the noncompressed ratings. For purposes of this research memorandum, a billet promotion index is defined as the ratio of billets of one paygrade to the billets of the paygrade below it (e.g., the number of E-9 billets divided by the number of E-8 billets for a particular rating, thus indicating the possible promotion opportunity to E-9 for that rating). In reality, promotion opportunity depends on both billet structure and continuation behavior. Billet structure determines the number of vacancies for promotion. Continuation behavior determines the numbers of vacancies that actually occur and the number of people left to be promoted. Thus,

$$\text{"True" promotion opportunity to E-9} = \frac{\text{Number of openings available at E-9}}{\text{Number of E-8s due for promotion and who want to continue}}$$

The numerator depends on both the number of E-9 billets and E-9 attrition. The denominator depends on the E-8 inventory, those eligible for promotion and retention.

This research memorandum does not address the effects of continuation behavior on promotion opportunity. It does endeavor to describe the enlisted billet structure as it existed at a particular time, however, by comparing ratings for promotion indices. The intent of this analysis is to provide data for use in the Enlisted Force Management Integration Study. In addition, these data should aid Navy manpower managers as they strive to develop guidelines for paygrade distribution.

COMPRESSED RATINGS

"Compressed" ratings are distinguished from other enlisted ratings in that they combine either general or service ratings that possess similar occupational skills to form a broader occupational field. Most of these rating combinations occur at the E-8 or E-9 paygrade. An example of a general ratings combination is the combination of the Instrumentman (IM) rating and the Opticalman (OM) rating to form the Precision Instrumentman (PI) rating at the E-9 paygrade. Service ratings, subdivisions of certain general ratings, identify specific skills and special areas of qualifications of personnel. An example of a service rating combination is the Aviation Boatswain's Mate (AB) general rating that is the combination of three associated service ratings at the E-8 paygrade--Aviation Boatswain's Mate (Launching and Recovery Equipment) (ABE), Aviation Boatswain's Mate (Fuels) (ABF), and Aviation Boatswain's Mate (Aircraft Handling) (ABH).

COMPARISON OF ENLISTED BILLET STRUCTURES

Table 1 lists the structure of the "compressed" ratings billets. The point at which the rating combinations occur are depicted in table 2. Table 3 lists all of the other ratings, i.e., the "noncompressed" ratings, and their billet structure. These tables are confined to petty officers (strikers and apprentices are not included). Each group consists of 51 ratings, but as can be seen from their respective tables, the number of billets in each rating and paygrade varies significantly.

Generally, with a few exceptions, both groups follow similar patterns of billet "flows" from E-4 through E-9. These flow patterns are characterized by minor decreases in the number of billets, at varying rates, from E-4 to E-5, then sharp decreases in the number of billets, again at varying rates, from E-5 through E-9.

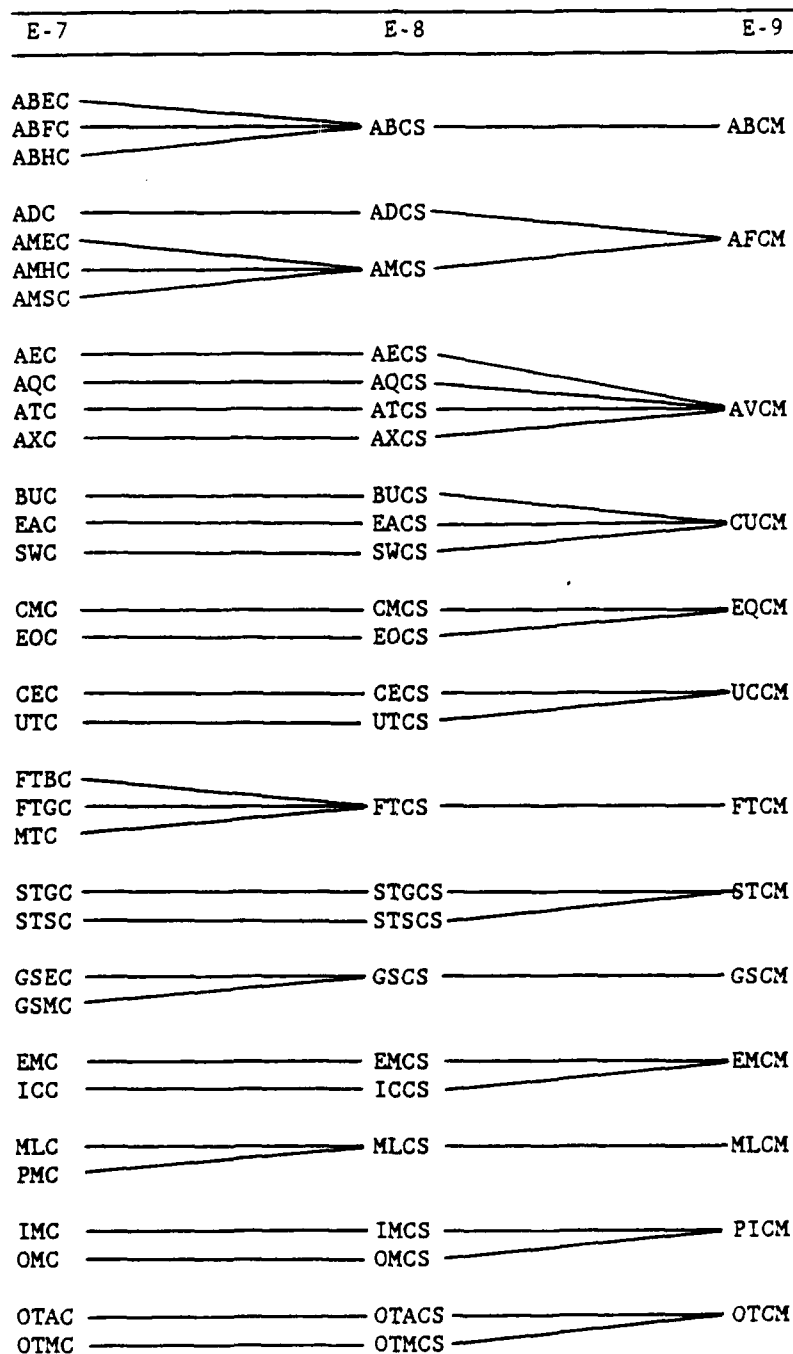
Weighted arithmetic means, representing average billet promotion indices, were computed for five groups of ratings:

- All enlisted billets (ALNAV)

Table 1. Structure of compressed ratings billets (June 1988)

Rating	E4	E5	E6	E7	E8	E9
Aircraft Maintenance (AF)						387
Aviation Machinist's Mate (AD)	2,659	3,039	2,648	943	472	
Aviation Structural Mechanic (AM)					394	
Aviation Structural Mechanic (Safety Equipment) (AME)	551	733	633	193		
Aviation Structural Mechanic (Hydraulics) (AMH)	1,022	1,577	1,241	505		
Aviation Structural Mechanic (Structures) (AMS)	2,135	2,225	1,733	725		
Avionics Technician (AV)						400
Aviation Electrician's Mate (AE)	1,955	2,784	1,942	641	293	
Aviation Fire Control Technician (AQ)	744	950	672	225	109	
Aviation Electronics Technician (AT)	2,809	3,794	2,391	1,021	434	
Aviation Antisubmarine Warfare Technician (AX)	458	789	483	217	73	
Electrician's Mate (EM)	5,421	3,826	3,275	1,382	448	215
Interior Communications Electrician (IC)	1,967	1,867	1,293	619	76	
Ocean Systems Technician (OT)						19
Ocean Systems Technician (Analyst) (OTA)	290	365	357	141	41	
Ocean Systems Technician (Maintainer) (OTM)	106	142	130	50	15	
Precision Instrumentman (PI)						3
Instrumentman (IM)	163	228	180	62	19	
Opticalman (OM)	109	109	122	45	6	
Sonar Technician (ST)						106
Sonar Technician Surface (STG)	1,779	1,386	1,299	608	207	
Sonar Technician Submarine (STS)	1,580	707	861	295	228	
Constructionman (CU)						47
Engineering Aid (EA)	94	110	89	34	13	
Builder (BU)	664	787	607	294	79	
Steelworker (SW)	263	221	187	87	27	
Utilitiesman (UC)						25
Construction Electrician (CE)	356	450	334	116	43	
Utilitiesman (UT)	295	416	279	91	35	
Equipmentman (EQ)						31
Construction Mechanic (CM)	410	489	339	122	35	
Equipment Operator (EO)	523	503	434	122	39	
Aviation Boatswain's Mate (AB)					149	71
Aviation Boatswain's Mate (Launching & Recovery Equipment) (ABE)	788	650	406	213		
Aviation Boatswain's Mate (Fuels) (ABF)	646	429	255	185		
Aviation Boatswain's Mate (Aircraft Handling) (ABH)	1,203	708	591	243		
Fire Control Technician (FT)					185	59
Fire Control Technician (Ballistic Missiles) (FTB)	338	237	238	91		
Fire Control Technician (Guns) (FTG)	425	389	660	148		
Missile Technician (MT)	814	493	427	155		
Gas Turbine Systems Technician (GS)					114	21
Gas Turbine Systems Technician (Electrical) (GSE)	391	331	323	178		
Gas Turbine Systems Technician (Mechanical) (GSM)	695	587	413	260		
Molder (ML)	66	68	47	40	5	2
Patternmaker (PM)	37	50	52	20		
Gunner's Mate (GM)				1005	160	57
Gunner's Mate (Guns) (GMC)	625	679	704			
Gunner's Mate (Missiles) (GMM)	1,294	1,316	1,255			
Aviation Support Equipment Technician (AS)			544	165	78	17
Aviation Support Equipment Technician (Electrical) (ASE)	355	413				
Aviation Support Equipment Technician (Mechanical) (ASM)	493	614				

Table 2. Path of advancement for compressed ratings



SOURCE: BUPERSNOTE 1418, 29 Sep 1987.

NOTE: GMMs and GMGs are combined to form the GM rating at the E-7 paygrade. ASEs and ASMs are combined to form the AS rating at the E-6 paygrade.

Table 3. Structure of noncompressed ratings billets (June 1988)

Rating	E4	E5	E6	E7	E8	E9
Aerographer's Mate (AG)	480	430	399	137	50	13
Air Traffic Controller (AC)	745	949	665	242	64	25
Aircrew Survival Equipmentman (PR)	559	759	526	140	65	21
Aviation Antisubmarine Warfare Operator (AW)	685	1,183	891	382	104	35
Aviation Maintenance Administration (AZ)	999	1,484	919	432	106	49
Aviation Ordnanceman (AO)	1,855	1,805	1,665	515	159	67
Aviation Storekeeper (AK)	1,260	1,802	931	371	77	51
Boatswain's Mate (BM)	4,158	3,789	2,256	1,361	418	166
Boiler Technician (BT)	3,703	2,432	1,998	853	293	204
Cryptologic Technician Technical (CTT)	531	715	617	281	68	35
Cryptologic Technician Administrative (CTA)	258	394	256	142	44	18
Cryptologic Technician Maintenance (CTM)	702	923	530	186	65	28
Cryptologic Technician Communication (CTO)	582	535	450	180	54	31
Cryptologic Technician Collection (CTR)	546	556	496	251	70	28
Cryptologic Technician Interpretive (CTI)	221	348	344	129	32	15
Damage Control (DC)	1,588	1,031	969	690	82	54
Data Processing Technician (DP)	1,041	1,073	780	386	74	26
Data Systems Technician (DS)	1,055	844	697	233	43	21
Dental Technician (DT)	901	670	408	192	57	22
Disbursing Clerk (DK)	692	800	737	160	89	18
Electronics Technician (ET)	6,875	5,805	4,544	1,931	520	223
Electronics Warfare Technician (EW)	769	597	715	434	74	30
Engineman (EN)	2,965	2,491	2,207	872	191	101
Fire Controlman (FC)	3,168	2,095	2,157	1,020	314	146
Hospital Corpsman (HM)	6,917	5,364	3,557	2,317	472	206
Hull Maintenance Technician (HT)	2,244	2,513	1,979	654	198	85
Illustrator Draftsman (DM)	91	141	102	17	7	1
Intelligence Specialist (IS)	405	527	491	122	37	12
Journalist (JO)	177	256	189	111	38	9
Legalman (LN)		265	229	131	24	13
Lithographer (LI)	120	166	116	50	2	2
Machinery Repairman (MR)	732	1,082	663	234	44	23
Machinist's Mate (MM)	9,788	6,800	6,638	2,279	825	488
Master-at-Arms (MA)		274	1,274	559	158	82
Mess Management Specialist (MS)	4,817	4,423	3,460	1,361	327	189
Mineman (MN)	203	156	116	54	27	13
Musician (MU)	445	365	254	130	55	29
Navy Counselor (NC)			967	645	235	124
Operations Specialist (OS)	3,540	3,120	2,468	756	349	84
Personnelman (PN)	1,542	1,889	1,926	865	225	171
Photographer's Mate (PH)	492	511	337	128	30	15
Postal Clerk (PC)	588	200	197	58	15	17
Quartermaster (QM)	1,182	1,133	1,128	761	141	46
Radioman (RM)	5,100	4,817	3,251	1,402	597	172
Religious Program Specialist (RP)	296	262	185	73	18	7
Ship's Serviceman (SH)	1,461	1,277	1,002	263	132	88
Signalman (SM)	1,114	873	719	259	39	33
Storekeeper (SK)	2,374	2,976	2,300	1,428	401	170
Torpedoman's Mate (TM)	1,293	922	995	477	78	61
Weapons Technician (WT)	308	304	281	139	34	24
Yeoman (YN)	2,943	3,490	2,962	1,536	372	124

NOTE: The LN and MA ratings begin at the E-5 paygrade. The NC rating begins at the E-6 paygrade.

- Noncompressed ratings
- Compressed ratings
- Ratings compressed at the E-8 paygrade
- Ratings compressed at the E-9 paygrade.

The results of these computations are presented in table 4.

Table 4. Average billet promotion indices (percentages)

Paygrade	ALNAV	Noncompressed ratings	Compressed ratings	Ratings compressed at E-8	Ratings compressed at E-9
E-9	47.8	50.6	40.5	37.6	41.4
E-8	33.1	30.6	37.8	30.9	40.6
E-7	46.0	47.3	42.6	45.4	40.5
E-6	87.4	89.8	83.1	88.2	77.7
E-5	100.9	97.1	109.5	102.5	112.0

Although the billet promotion indices vary considerably among each group, some similarities exist. For example, a comparison of the compressed ratings group and the noncompressed ratings group reveals that the latter has higher billet promotion indices for E-6, E-7, and E-9, while the compressed ratings group has higher indices for the E-5 and E-8 paygrades. Of the two groups of compressed ratings, those combined at the E-8 paygrade and those combined at the E-9 paygrade, the E-9 compressed ratings group has higher indices at three of the five paygrades: E-5, E-8, and E-9.

The variations in billet promotion indices for individual ratings (compressed and noncompressed) are illustrated in table 5. The table indicates, by paygrade, the number of ratings averaged and the resulting range of individual rating indices. For example, the average billet promotion index for compressed ratings to E-9 (40.5 percent) was the result of averaging the weighted values of 15 ratings over a range of individual indices from 12.0 percent to 47.6 percent. Likewise, the 50.6-percent average index to E-9 for noncompressed ratings was the result of averaging the weighted values of 51 ratings over a range of individual indices from 14.3 to 113.3 percent.

Table 5. Range of billet promotion indices

Paygrade	Number of ratings	Range of individual indices (percent)
Compressed ratings		
E-9	15	12.0 to 47.6
E-8	28	8.3 to 77.3
E-7	35	22.4 to 85.1
E-6	36	52.9 to 169.7
E-5	37	44.7 to 172.3
Noncompressed ratings		
E-9	51	14.3 to 113.3
E-8	51	4.0 to 55.6
E-7	51	16.7 to 71.2
E-6	50	64.9 to 464.9
E-5	48	34.0 to 172.7

Figure 1 examines the distribution of promotion indices for individual rating billets for the compressed and noncompressed rating groups. The figures in the illustration are called "box plots" and show, for each group and paygrade, the 10th, the 25th, the median (50th), the 75th, and the 90th percentile value for promotion indices for individual ratings billets.

The noncompressed ratings have higher median values of indices at the E-7 and E-9 paygrades (42.9 and 46.2 percent, respectively), whereas the compressed ratings have higher median values at the E-5, E-6, and E-8 paygrades (108.6, 82.2, and 31.9 percent, respectively). A comparison of median values produces results similar to those produced previously in a comparison of weighted arithmetic means (table 4). The only difference occurs at the E-6 paygrade. The weighted arithmetic mean value of indices for E-6 noncompressed ratings is 89.8 percent, and for compressed ratings it is 83.1 percent. The median value of the indices for E-6 noncompressed ratings is 78.6 percent, and for compressed ratings it is 82.2 percent. The reason for the higher arithmetic mean value is the 364.9-percent increase in the number of Master-at-Arms billets at the E-6 paygrade.

For every case, the median value of the indices is lower than the weighted arithmetic mean. This is because most of the larger ratings have higher indices, thus increasing the value of the arithmetic mean. The weighted arithmetic means (table 4) is used in this research

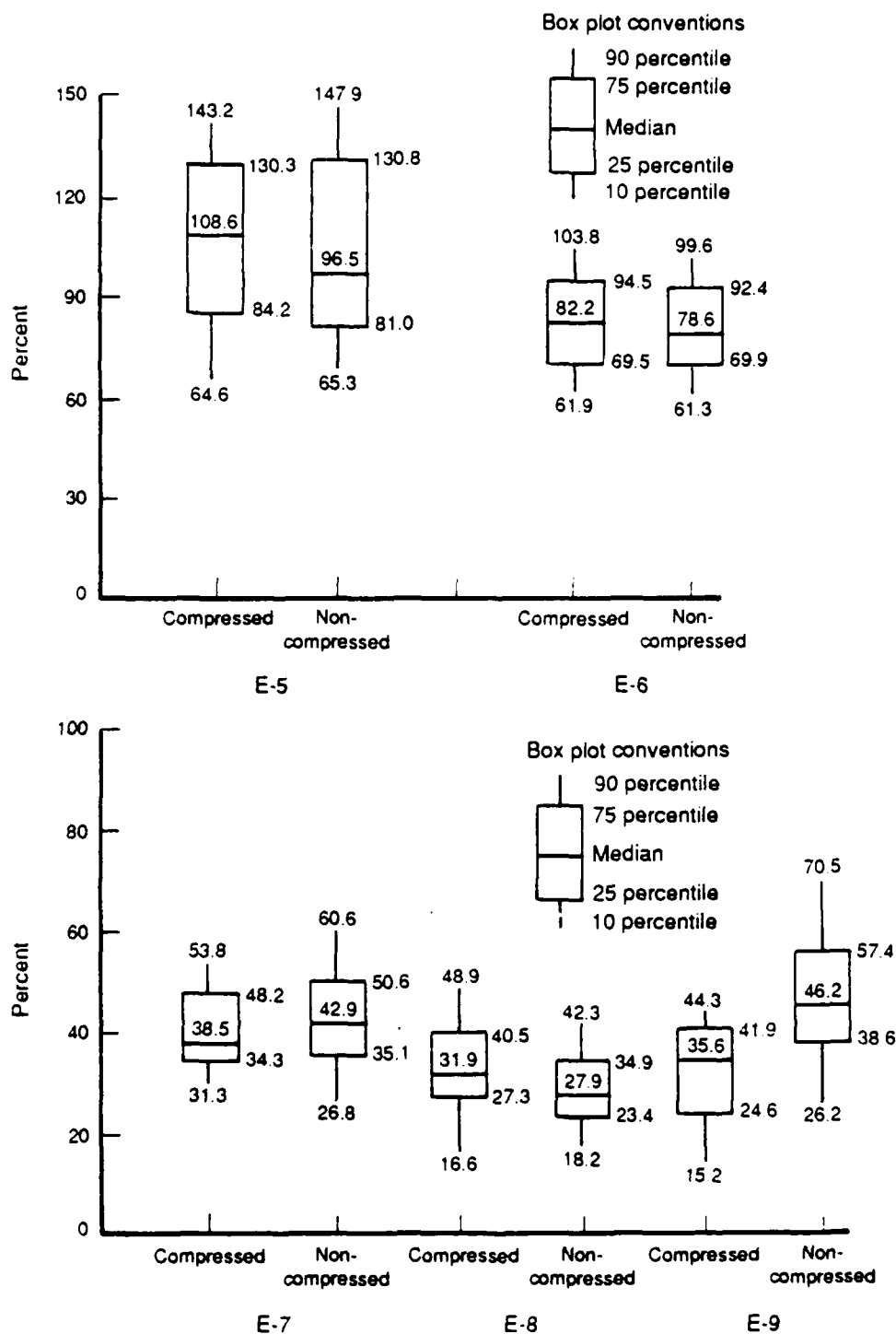


Figure 1. Range of promotion indices for individual ratings billets (for compressed and noncompressed ratings)

memorandum to define the promotion index for the average paygrade billet.

Figure 2 clearly illustrates the distribution similarities for paygrade billets between the compressed and noncompressed ratings. The number of billets in each successive paygrade, for both groups, decreases only a few percentage points from E-4 to E-6 but drops drastically at the E-7 level. Additionally, the upper paygrade billets, E-7, E-8 and E-9, constitute an almost identical percentage of the total billet structure for both groups, i.e., 14.9 percent for the compressed ratings and 15.1 percent for the noncompressed ratings.

Table 6 exhibits billet promotion indices within a sample of ratings that were chosen to illustrate the significant variation in the indices that exists among individual compressed and noncompressed ratings. The indices vary greatly between each rating group as well as among rating types, i.e., sea- or shore-intensive ratings. For example, the sea-intensive Sonar Technician compressed rating has a billet promotion index to E-9 of 24.4 percent; whereas, the shore-intensive Personnelman noncompressed rating has a corresponding index of 76.0 percent. However, the index to E-8 is much better for the Sonar Technician (Surface) and Sonar Technician (Submarine) service ratings (34.1 percent and 77.3 percent, respectively) than for the Personnelman rating, which is only 26.0 percent. Machinist's Mates and Boiler Technicians, two sea-intensive noncompressed ratings, have higher indices to E-8 and E-9 (36.3/59.2 percent and 34.4/69.6 percent, respectively) than the average noncompressed rating (30.6/50.6 percent). Their E-9 indices are also higher than the average compressed rating, which is only 40.5 percent.

Conversely, the indices for the Operations Specialist rating, a sea-intensive noncompressed rating, are lower than the corresponding average indices for the compressed and noncompressed ratings at the E-6, E-7, and E-9 paygrades but higher at the E-8 level. Likewise, the Air Traffic Controller rating, a shore-intensive noncompressed rating, has lower promotion opportunities at every paygrade compared to both the average compressed and noncompressed rating.

When viewed on a macro level, it is apparent that one rating group may have higher billet promotion indices at certain paygrades than another group (see table 4). However, this group characteristic may not hold true for every rating within the group. As illustrated in table 6, billet promotion indices for individual ratings within each group vary significantly at every paygrade. There is no evidence of a "problem" with compressed ratings. Their billet ratios are within the range or are consistent with billet ratios for noncompressed ratings.

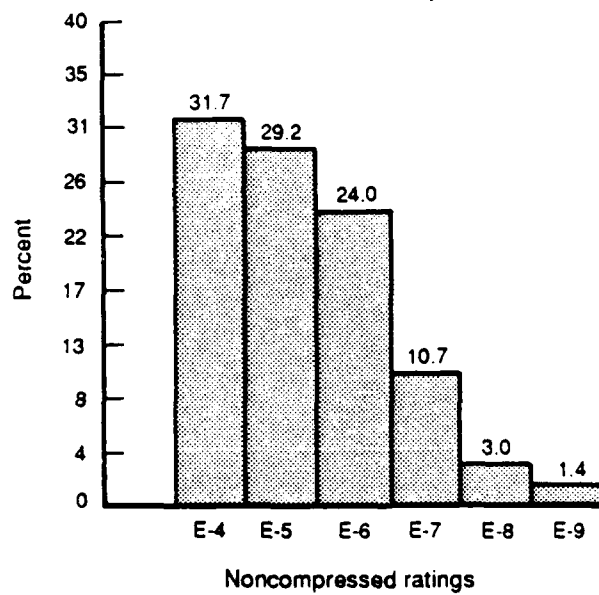
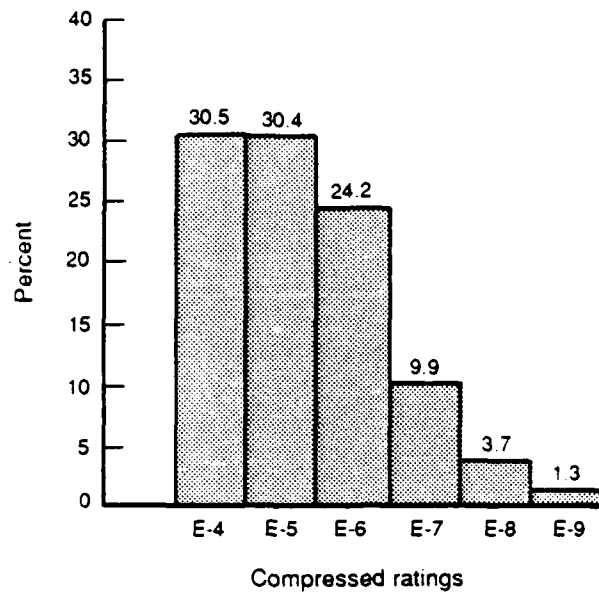


Figure 2. Paygrade distribution (for compressed and noncompressed ratings)

Table 6. Individual billet promotion indices (percentage)

Rating	E-6	E-7	E-8	E-9
Compressed ratings				
Aircraft Maintenanceman (AF)				44.7
Aviation Machinist's Mate (AD)	87.1	35.6	50.1	
Aviation Structural Mechanic (AM)			27.7	
Aviation Structural Mechanic (Safety Equipment) (AME)	86.4	30.5		
Aviation Structural Mechanic (Hydraulics) (AMH)	78.7	40.7		
Aviation Structural Mechanic (Structures) (AMS)	77.9	41.7		
Gunner's Mate (GM)		51.3	15.9	35.6
Gunner's Mate (Guns) (GMG)	95.4			
Gunner's Mate (Missiles) (GMM)	103.7			
Sonar Technician (ST)				24.4
Sonar Technician (Surface) (STG)	93.7	46.8	34.1	
Sonar Technician (Sub) (STS)	121.8	34.3	77.3	
Noncompressed ratings				
Air Traffic Controller (AC)	70.1	36.4	26.5	39.1
Aviation Ordnanceman (AO)	92.2	30.9	30.9	42.1
Boiler Technician (BT)	82.2	42.7	34.4	69.6
Fire Controlman (FC)	102.9	47.3	30.8	46.5
Hospital Corpsman (HM)	66.3	65.1	20.4	43.6
Machinist's Mate (MM)	97.6	34.3	36.3	59.2
Mineman (MN)	74.4	46.6	50.0	48.2
Mess Management Specialist (MS)	78.2	39.3	24.0	57.8
Operations Specialist (OS)	79.1	30.6	46.2	24.1
Personnelman (PN)	101.9	44.9	26.0	76.0
Signalman (SM)	82.4	36.0	15.1	84.6
Yeoman (YN)	84.9	51.9	24.2	33.3

LEGALMAN, MASTER-AT-ARMS, AND NAVY COUNSELOR RATINGS

The Legalman (LN), Master-at-Arms (MA), and Navy Counselor (NC) ratings are unique in that they possess characteristics similar to the compressed ratings but technically are not compressed ratings. These ratings are established at the more senior paygrades (LN and MA at E-5, NC at E-6) and are composed of personnel who have converted from other ratings. Unlike the compressed ratings, a formal structure of general or service ratings leading to conversion to one of these three ratings does not exist.

A review of rating conversions to LN, MA, and NC that occurred between March 1980 and December 1987 revealed that, although the number of ratings represented is quite large, some ratings supply more personnel than others. Personnel converting to the Legalman rating came from 42 different ratings; those converting to the Master-at-Arms rating came from 84 different ratings; and those converting to the Navy Counselor rating came from 94 different ratings. Table 7 shows the largest sources of personnel into the LN, MA, and NC ratings by displaying those ratings that constitute 3.0 percent or more of the total conversions to each of the subject ratings.

Table 7. Sources of rating conversions (ratings constituting 3.0 percent or more of total conversions)

Rating	Percentage
Conversion to Legalman rating	
Yeoman (YN)	79.3
Personnelman (PN)	4.9
Conversion to Master-at-Arms rating	
Boatswain's Mate (BM)	22.0
Mess Management Specialist (MS)	6.5
Ship's Serviceman (SH)	4.9
Yeoman (YN)	4.9
Aviation Boatswain's Mate (Aircraft Handling) (ABH)	3.3
Conversion to Navy Counselor rating	
Radioman (RM)	8.0
Mess Management Specialist (MS)	7.1
Boatswain's Mate (BM)	5.8
Yeoman (YN)	5.4
Personnelman (PN)	3.7
Ship's Serviceman (SH)	3.4

As seen in the table, the Legalman rating is clearly dominated by personnel from the Yeoman rating. Conversions to the Master-at-Arms rating, spread over twice as many ratings as Legalman conversions, are composed mostly of personnel from the Boatswain's Mate rating. Conversions to the Navy Counselor rating are spread among an even greater number of ratings with the Radioman and Mess Management Specialist ratings constituting the largest percentages of conversions.

Several of the ratings represented in these conversions appear with greater frequency than others. The data in table 7 show that the Yeoman rating accounts for a relatively high percentage of conversions in all three of the subject ratings. Individuals from the Personnelman rating convert frequently to both the Legalman and Navy Counselor ratings. Likewise, personnel from the Boatswain's Mate, Mess Management Specialist, and Ship's Serviceman ratings convert to the Master-at-Arms and Navy Counselor ratings at relatively high rates.

Except for the Legalman rating conversions, those ratings displayed in table 7 do not represent a majority of all conversions. In the case of the Master-at-Arms rating, these five ratings account for only 41.6 percent of the total conversions to MA. The remainder are represented by 79 other ratings. The six ratings representing the largest sources of converttees to the Navy Counselor rating represent only 33.4 percent of the total conversions to NC. The remaining 66.6 percent are spread among 84 other ratings.

Some similarities exist among those five ratings that tend to convert more frequently. The Boatswain's Mate, Mess Management Specialist, Ship's Serviceman, Yeoman and Personnelman ratings are similar in that they require low-technology skills and that they constitute a relatively large number of billets.

The reasons for personnel conversion to other ratings are beyond the scope of this memorandum, but it may be assumed that one of the reasons is the perception of better promotion opportunities. In some cases, among the five ratings discussed above, this is true. Because promotion opportunity varies greatly among paygrades and ratings, the evidence to support this assumption is inconclusive.

CONCLUSIONS

In summary, the enlisted billet structure consists of both compressed and noncompressed ratings. Compressed ratings are those general or service ratings possessing similar occupational skills that are combined at the senior paygrades to form broader occupational fields.

In general, the enlisted billet flow pattern for both compressed and noncompressed ratings is characterized by a slight decrease in the number of billets from E-4 to E-5 followed by a sharp decrease in the number of billets from E-5 through E-9. However, the number of billets in each rating and paygrade varies significantly.

A billet promotion index (an incomplete measure of promotion opportunity) is defined as a ratio of the number of billets in one paygrade to the number of billets in the next lower paygrade. A comparison of average billet promotion indices reveals that the noncompressed rating group has higher mean values at the E-6, E-7, and E-9 paygrades. This indicates that, as a group, their promotion opportunities, disregarding continuation behavior, are better than those in the compressed rating

group at these paygrades. Examination of individual ratings within these two groups reveals that the indices do not follow this group characteristic but vary significantly with rating and paygrade. There is no evidence of compressed ratings billet ratios being out of line or being inconsistent with the billet ratios for noncompressed ratings.

Many ratings have participated in conversions to the Legalman, Master-at-Arms, and Navy Counselor ratings; however, several ratings with similar characteristics tend to convert more often than others.